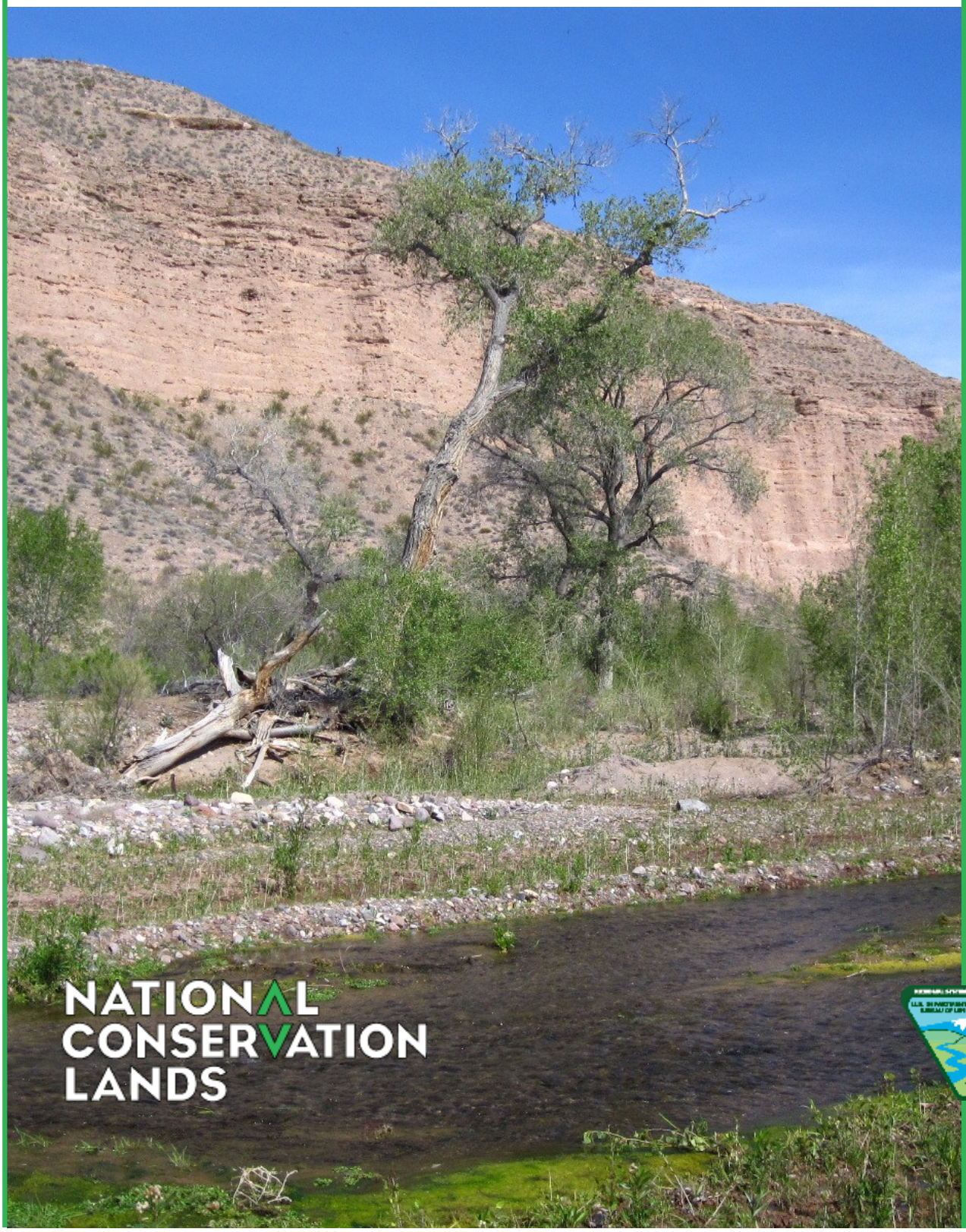
2013 Manager's Annual Report

Beaver Dam Wash

National Conservation Area

Manager's Annual Report
FY 2013



BLM

Utah

Table of Contents

1 Beaver Dam Wash NCA Profile

Designating Authority

The designating authority for the Beaver Dam Wash National Conservation Area (NCA) is the *Omnibus Public Land Management Act* of 2009 (Public Law 111-11, hereinafter OPLMA) at Title I, Subtitle O, Washington County, Utah, sec. 1975. The designation was amended by a map included in the 2010 Interior and Environment Appropriations Bill Conference Agreement of October 2009 showing modifications to the boundaries that reduced the public land acreage of the NCA from approximately 68,083 acres to the current acreage of approximately 63, 478 acres.

Date of Designation: March 30, 2009

Location and Acreage

The Beaver Dam Wash NCA is located entirely within Washington County, Utah and encompasses approximately 63, 478 acres of BLM-managed public land. Within the boundaries of the NCA are approximately 2,127 acres of private inholdings and 6,492 acres of land managed by the State of Utah's Institutional Trust Lands Administration. The total acreage is approximately 72,097 acres.

Contact Information

Unit Manager	Phone	E-mail	Mailing Address
Dawna Ferris-Rowley	435-688-3216	d8ferris@blm.gov	345 E. Riverside Dr. St. George, UT 84790

Field Office	District Office	State Office
St. George	Color Country	Utah

Additional information about the NCA can be found at: http://www.blm.gov/ut/st/en/fo/st__george/blm_special_areas/national_landscape/national_conservation/beaver_dam_wash_national.html

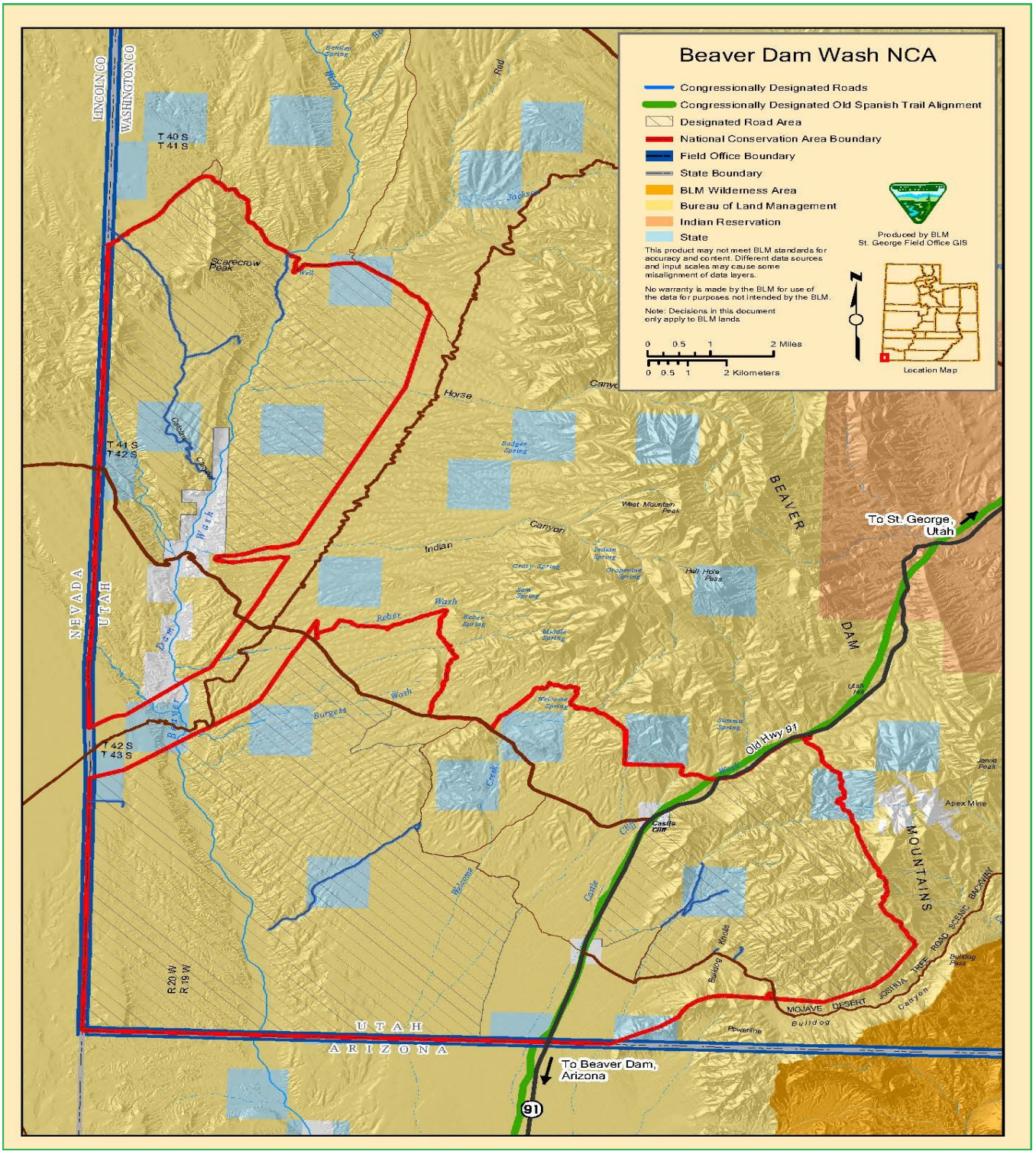


Figure 1. Map of Beaver Dam Wash NCA, showing land status, designated road areas, and legislatively-designated Northern Route of Old Spanish National Historic Trail.

Staffing

The Beaver Dam Wash NCA shares management and staff with the Red Cliffs National Conservation Area, also located in Washington County, Utah and administered by the St. George Field Office. The NCA Manager supervises the positions listed below that comprise the staff for the two NCAs. These same staff provide support to the St. George Field Office (SGFO), performing work in their areas of expertise on public lands outside of the two NCAs.

Archeologist

Archeological Technician

Biologist

GIS Specialist

Landscape Architect

Outdoor Recreation Planner-2

Park Ranger-2

Administrative Support, Lands and Realty, Rangeland Management, and Law Enforcement staff from the SGFO work in these functional areas for the NCA. Fire Management, Engineering, and Force Account support for the NCA is provided by the Color Country District Office, located in Cedar City, Utah.

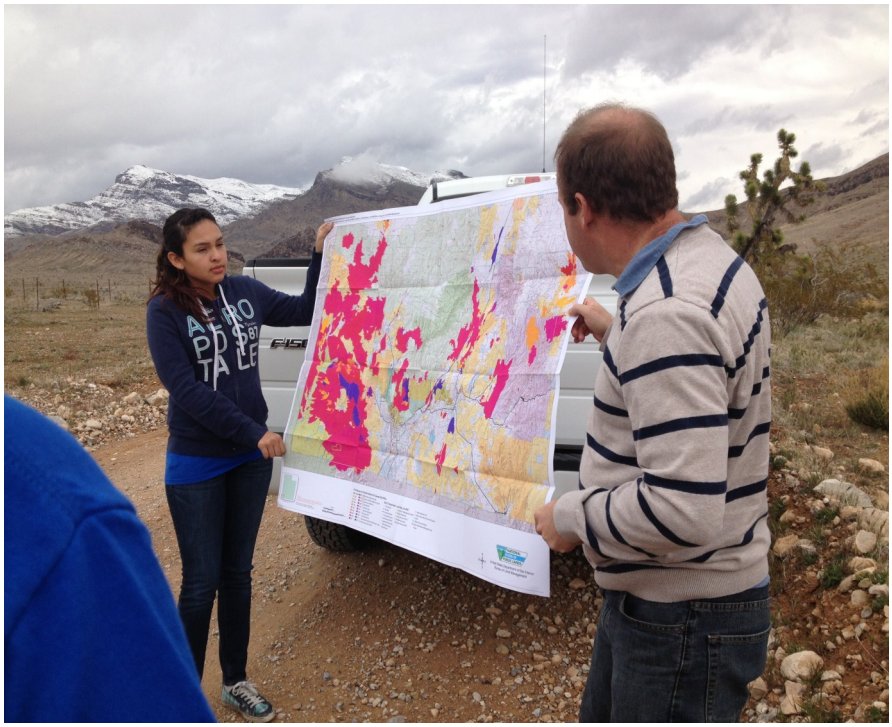


Photo 1. NCA Biologist describes recent fire history in Washington County to high school students from Mesquite, Nevada who assisted with experimental re-vegetation project in the NCA.

2 Planning and NEPA

Status of RMP

The Beaver Dam Wash NCA is currently managed under the goals, objectives, and management decisions identified for the public lands within the NCA by the *St. George Field Office Record of Decision and Resource Management Plan* (RMP, 1999), as modified by the designation language of OPLMA, at Subtitle O, Title 1, sec. 1975. Through OPLMA, Congress segregated the public lands of the NCA from entry under the General Mining Law, the Mineral Leasing Act, the Fluid Minerals Leasing Act, subject to any valid existing rights, and from disposal under the public land laws. The legislation also directed BLM to develop a comprehensive management plan (RMP) for the long term management of the NCA.

Through OPLMA, Congress identified three areas within Beaver Dam Wash NCA where all public motorized vehicle travel was to be limited to designated roads and the specific roads within these areas that were designated for motorized vehicle travel; these areas and roads were shown on the legislative map of the NCA (refer to Figure 1). Outside of the "Designated Road Areas", motorized vehicle travel was to be limited to roads that would be designated by BLM, through the Comprehensive Travel and Transportation Management Plan that Congress directed BLM to complete for public lands in Washington County (OPLMA, Subtitle O, sec. 1979).

In 2010, the SGFO initiated a planning process to prepare new RMPs for the Beaver Dam Wash and Red Cliffs NCAs, as well as a focused amendment for the SGFO RMP. A single Environmental Impact Statement would support the new RMPs and SGFO RMP Amendment. A Notice of Intent (NOI) was published in the *Federal Register* on May 10, 2010 (Vol.75, No. 89: 25876-25877), initiating a 90 day public scoping process that included four public workshops. A Scoping Report was completed in October, 2010 and issues identified through scoping used to develop the range of management alternatives for the draft RMPs and RMP Amendment. The release of Draft RMPs for the Beaver Dam Wash and Red Cliffs NCAs and the Draft Amendment for the St. George Field Office RMP/DEIS for a 90 day public review and comment period is expected in the fall of 2014.

Status of Activity Plans

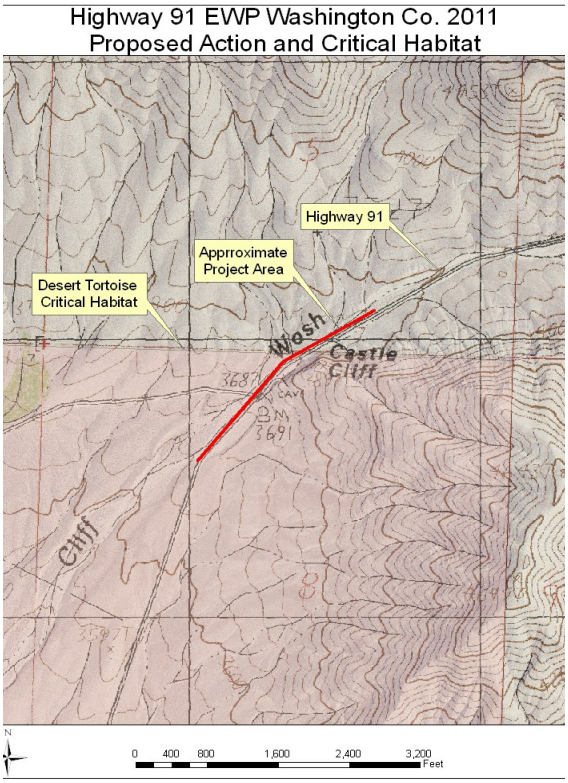
Comprehensive Travel and Transportation Management Plan (TMP)

Initial public scoping for the TMP was conducted during the four scoping workshops that were held in June of 2010 for the RMP-level planning efforts. A Scoping Report was completed in October, 2010 and issues identified through scoping used to develop the range of management alternatives for the draft TMP. Informal scoping with various Federal, State, Tribal, local governments, and diverse public land user groups has been on-going since 2010. Evaluations have been completed for all routes in Washington County (2800 miles), including those within the NCA that are available for public travel. A draft TMP, supported by an Environmental Assessment, is scheduled to be released for public review in 2015.

Status of RMP Implementation Strategy

As the RMP for the Beaver Dam Wash NCA has yet to be completed and approved, no Implementation Strategy has been developed.

Key NEPA Actions and/or Authorizations



During FY13, a Title V right-of-way (ROW) application was submitted by Washington County requesting authorization to use public lands for four native rock rip-rap erosion control structures along U.S. Highway 91, three of which would be located partially within the Beaver Dam Wash NCA. U.S. Highway 91, locally known as "Old Highway 91", was initially constructed in the 1920s and neither the alignment and drainage systems were engineered to modern highway standards. Because the highway crosses several major drainages in this area, it is very susceptible to damage from seasonal flooding. Washington County, which holds a 100-foot wide road ROW for this highway, must make costly repairs after each flood event. The County proposed to construct erosion control structures that would extend outside of its current ROW onto public lands to lessen the need for repeated road repairs and help protect the safety of motorists.

An Environmental Assessment was completed that evaluated the County's proposal and reasonable alternatives and analyzed how the proposed ROW authorization might impact the resource values for which the NCA was Congressionally-designated in 2009. As the proposed new ROW would affect less than 0.14 of an acre of public land within the NCA and resource impacts would be negligible, approval of the ROW grant was determined to be consistent with BLM Manual 6220 and in conformance with the St. George Field Office RMP (1999), under which the NCA is currently managed. A Decision Record, supported by a Finding of No Significant Impact, was signed on January 18, 2013, granting a ROW to Washington County for erosion control structures along U.S. Highway 91 within and adjacent to the NCA.

Photo 2. View of "Old" Highway 91 through Beaver Dam Wash NCA. This highway generally follows the alignments of earlier travel routes, including the Northern Route of the Old Spanish National Historic Trail, an early 19th century long distance pack trail.

3 Year's Projects and Accomplishments

General Accomplishments

During FY13, the NCA Manager and staff focused on developing a new RMP for the NCA and on completing route evaluations for the TMP. A range of management alternatives were drafted for the RMP, in part using data collected by field inventories completed by NCA staff during this fiscal year. These included field inventories to identify and evaluate lands with wilderness characteristics within the NCA and to complete a viewshed analysis for the Old Spanish Trail National Historic Trail (NHT); the legislatively-defined Northern Route of NHT crosses the NCA, generally following the route of "Old Highway 91". All routes within the NCA that are outside of the three "Designated Road Areas", identified by Congress through OPLMA, were evaluated for designation as "open", "limited to designated roads", or "closed" to OHV travel in the TMP being developed for all public lands in Washington County.

Current Areas of Focus

Current and future management of the Beaver Dam Wash NCA must focus on protection of intact native Mojave Desert vegetation communities and designated critical habitat for the threatened Mojave desert tortoise (*Gopherus agaissizii*) from further damage and loss to wild fires. As desert shrubs, particularly mature blackbrush (*Coleognyne ramossisima*) and Joshua tree (*Yucca brevifolia*) shrublands, are not fire-adapted species, recovery after fire may take decades or centuries; recurrent fires can prevent the re-establishment of these native species. Desert tortoises and other Mojave Desert species rely on native vegetation communities for forage that meets their unique physiological adaptations to this hot and arid environment, as well as for cover and shade.

Large-scale or frequent wild fires were never part of the natural fire regime of the Mojave Desert. Some species, such as the creosote bush (*Larrea tridentata*), are naturally fire-resistant, while others do not grow in close proximity to one another, maintaining areas of bare ground between plants that impede the spread of fires. Exotic invasive annual brome grasses (*Bromus* spp.), "cheatgrass" and "red brome", today fill in the gaps between desert shrubs, creating a continuous and highly flammable fuel source that has completely altered the size, intensity, and return interval of fires in the Mojave Desert. When above-average fall and winter precipitation stimulates high annual brome grass production, the potential for large-scale summer fires increases. In 2005 alone, wildfires consumed 2.5% of the entire land area of the Mojave Desert (in Arizona, California, Nevada, and Utah), leading many ecologists to conclude that wild fires, fueled by exotic invasive species, are the primary threat to the persistence of this ecosystem and the native species for which it provides habitat.

In FY13, actions taken to protect native vegetation communities in the NCA included field inventories to map unburned and "once burned" areas of blackbrush and Joshua trees, so that these areas could be prioritized for protection in the event of wild fires. Geospatial data was provided to Fire Management personnel and Resource Advisors to assist fire suppression efforts.

An inventory was also completed of all roads and routes in the NCA that could be enhanced for use as fire breaks, through herbicide treatments or low impact mechanical methods. Data from this inventory was included in landscape level proposals that were jointly submitted by BLM's Arizona Strip Field Office, the Caliente (Nevada) Field Station, and the SGFO for future funding through BLM's Healthy Landscape Initiative.

And, lastly, the NCA Manager and staff helped to coordinate a Mojave Desert Fire Ecology Workshop, described below, focused on the inter-relationships of wild fires, invasive species, and the potential impacts of climate change on the current fire regime.

Education, Outreach, and Interpretation

Mojave Desert Fire Ecology Workshop

During the week of April 16, 2013, Brigham Young University (BYU), BLM, U.S. Department of Agriculture, and The Nature Conservancy jointly hosted a three day Mojave Desert Fire Ecology Workshop at the Lytle Ranch, a BYU research facility located on private lands within the boundaries of the Beaver Dam Wash NCA. Land managers and staff from Federal, State, and County agencies in Utah, Arizona, and Nevada participated in the workshop and field trips to research sites on the Lytle Ranch property and on public lands within the NCA. The workshop included presentations by faculty and students from BYU, Utah State University, and the University of Nevada-Las Vegas on recent research that is evaluating the effects of fire on Mojave Desert vegetation and biological soil crusts; the role of small mammals and pollinators in native vegetation recovery and re-establishment; and experimental biological methods (e. g., "Black Fingers of Death" fungus) being studied to control exotic invasive brome grasses and improve the success of post-fire re-vegetation.

Partnerships

The Beaver Dam Wash NCA continues to be supported by the Dixie-Arizona Strip Interpretive Association (D'Asia) and the Southern Utah National Conservation Lands Friends (SUNCLF), through Cooperative Agreements. D'Asia provides volunteers that assist with public contacts and visitor services in the BLM/USFS Public Lands Information Center in St. George, UT and with special projects, such as cleanups of target shooting trash in the NCA .

SUNCLF assists BLM with volunteer programs, environmental education outreach, and special projects. As examples, SUNCLF recruits and helps to train volunteer site stewards who monitor archeological sites in the NCA and assist BLM Archeologists and researchers with field inventories.

In 2013, SUNCLF coordinated an experimental re-vegetation project in the NCA, involving high school students from Mesquite, NV. Students prepared "seed balls", encapsulating native shrub seeds in a soil and clay matrix that would protect the seeds from birds and rodents, until spring rains washed away the clay coating and stimulated germination. In early March, the students distributed the seed balls in a one-acre fire-damaged study plot that will be monitored to evaluate the effectiveness of encapsulating seeds in re-vegetation projects in the NCA.

Photo 3. Students Dispersing Seed Balls

Volunteers

Volunteers donated more than 500 hours of time in support of resource conservation in Beaver Dam Wash NCA in FY13, assisting BLM with resource monitoring and special projects. The following briefly describes highlights of the volunteer activities that occurred during this year.

Two of the most popular volunteer projects were the annual Audubon Society-sponsored Christmas Bird Count and the Migratory Bird Identification Hikes conducted during the annual St. George Winter Bird Festival. Volunteers assisted biologists from BLM and Utah Division of Wildlife Resources with the identification and counting of birds along Beaver Dam Wash and at other areas in the NCA, over several days in December and January.

During the year, six Trail Stewards from the Tres Rios Chapter of the Old Spanish Trail Association (OSTA) donated many hours of volunteer time hours examining archival documents and conducting field investigations in the NCA, in an effort to identify the overland travel route that might have been used by the Antonio Armijo and his trading party in 1827. The OSTA volunteers concluded that it was more likely that Armijo's route was through Bulldog Canyon, along the boundary of the NCA, rather than along the Virgin River gorge, as is currently shown on the legislative map for the Old Spanish Trail NHT. The information collected by the OSTA Trail Stewards assisted the development of management alternatives for the Old Spanish Trail NHT in the new RMP that is being drafted by BLM for the NCA.

Budget

The figures below show the functional areas and funding levels received for management of the NCA in FY13.

Washington Office Base Funding L1711	
Beaver Dam NCA	$250,000

Functional Area	Labor	Operations	**TOTAL FUNDING**
L1010 - Soil, Water Air	$4,364	$375	**$4,739**
L1020 - Range	$8,728	$750	**$9,478**
L1040 - Riparian	$5,236	$450	**$5,686**
L1050 - Cultural	$42,802	$3,375	**$46,177**
L1110 - Wildlife	$5,236	$450	**$5,686**
L1150 - T&E Species	$19,222	$1,500	**$20,722**
L1220 - Recreation	$54,290	$4,612	**$58,902**
L1430 - Lands & Realty	$9,743	$787	**$10,530**
L1711 - NM & NCAs	$194,434	$16,912	**$211,346**
	$344,055	**$29,211**	**$373,266**

Land or Easement Acquisitions

No acquisitions were completed and no easements acquired in FY13.

4 Science

Science

A Science Plan has not yet been formalized for the Beaver Dam Wash NCA. However, opportunities for research that would inform the long-term management of the NCA are identified in the management alternatives that have been drafted for the NCA RMP and are anticipated to be included in a comprehensive Science Plan, after the RMP has been approved. Scientific research that is ongoing at this time includes the following:

BYU Mojave Desert Fire Ecology Studies

Dr. Samuel St Clair, other faculty, and students from the Plant and Wildlife Sciences Department at BYU are conducting long-term studies of post-fire Mojave Desert vegetation recovery and the factors that influence the re-establishment of native species. Five-acre fenced study plots on BYU's Lytle Ranch research facility, located along Beaver Dam Wash within the boundaries of the NCA, were established in 2008 and prescriptively burned. Over the past 5 years, studies have focused on how variable amounts of precipitation, and the timing of that precipitation, influence the re-establishment of native species. Other research topics have included the roles of rodents, other small mammals, and insect pollinators, in Mojave Desert plant recovery.

Photo 4. Prescribed fire on Lytle Ranch study plot in 2008.

While a majority of the research has been conducted on the Lytle Ranch private property, BLM has provided support by authorizing three study plots within the NCA, in areas where native vegetation was damaged or destroyed by fires in 2005-2006. As no re-seeding or other vegetation rehabilitation efforts were conducted in the three areas, the study plots provide control data on the factors that influence the trajectory of natural re-vegetation. Researchers from BYU will continue long-term monitoring of the plots, in an effort to better understand how biological soil crusts re-establish, as well as the effects of invasive species, livestock grazing, and recreational uses on natural re-vegetation in the Mojave Desert.

Photo 5. Cow and calf in Beaver Dam Slope Allotment, in the NCA.

5 Resources, Objects, Values, and Stressors

Resource, Object, or Value

The Congressionally-defined purposes for designation of the NCA, as stated in P.L.111-11 at Title I, Subtitle O at sec. 1975, are:

> *To conserve, protect and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the Beaver Dam Wash National Conservation Area.*

As Congress did not specifically define the resource values that give significance to this NCA, and benchmarks have not yet been established through a Science Plan, the following assessment focuses on those ecological values for which status and trend are currently being monitored in the NCA.

Ecological Values: Upland Native Vegetation Communities

The NCA is within a transition zone between the Mojave Desert and the Great Basin eco-regions and includes vegetation communities from the two eco-regions. The ecological health of the upland vegetation communities was initially evaluated in 2011, through a Landscape Conservation Forecasting Process conducted in partnership with The Nature Conservancy. The assessments of status and trend provided below are based on the Natural Range of Variability (NRV) used in that process. Monitoring is being conducted in each community, with the acreages completed in FY13 shown in the table below.

Upland Native Vegetation Status and Trend Table

Status of Resource, Object, or Value	Trend
Fair– all communities are 100% departed from the NRV, due to exotic invasive species.	Stable- in unburned areas (33,951 acres)

Upland Native Vegetation Inventory, Assessment, and Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
63,478	Creosote—22,041	Creosote—22,041	Creosote– 5,000
	Blackbrush-37, 281	Blackbrush- 37, 281	Blackbrush– 10,500
	Pinyon-juniper –270	Pinyon-juniper –270	Pinyon-juniper –50
	Mountain shrub-143	Mountain shrub-143	Mountain shrub– 25
	Big Sagebrush-14	Big Sagebrush-14	Big Sagebrush– 14
	Mountain mahogany-0.5	Mountain mahogany-0.5	Mountain mahogany-0.5.

Stressors Affecting this Resource, Object, or Value

Wild fires, exotic invasive annuals, and predicted climate changes that benefit invasive species are the primary stressors affecting all upland vegetation communities. Mature blackbrush-Joshua tree shrub lands, in particular, have been most severely impacted. Over the past 20 years, wild fires, fueled by exotic annual brome grasses, have burned or re-burned 80% (29, 527 acres) of this community; many re-burn areas have been converted to exotic brome grasslands that prevent the re-establishment of native species. As Mojave Desert vegetation is slow to recover, even under optimum conditions, it will be centuries before mature blackbrush and Joshua tree communities are again present in the fire-damaged areas of the NCA.

Resource, Object, or Value

Ecological Value: Joshua Tree National Natural Landmark (NNL)

The Joshua Tree NNL is located within the NCA and was designated by the Secretary of the Interior in 1966, as the best example of the Joshua tree vegetation community at the northern extreme of its range in the Mojave Desert. Sadly, catastrophic wildfires in 2005-2006 damaged or destroyed many of the Joshua trees of the NNL.

Joshua Tree NNL Status and Trend Table

Status of Resource, Object, or Value	Trend
Poor– NNL is fire-damaged and 100% departed from the NRV, due to exotic annual brome grasses and forbs.	Declining– slow post fire recovery of Joshua trees and proliferation of invasive annual brome species.

Joshua Tree NNL Inventory, Assessment, and Monitoring Table

Acres in NNL	Acres Inventoried	Acres Possessing Object	Acres Monitored
1,050	1,050	1,050	1,000

Stressors Affecting this Resource, Object, or Value

Wildfires, exotic invasive annuals, reduced opportunities for pollination, livestock grazing, and predicted climate changes that benefit invasive species are the primary stressors affecting this resource. Joshua trees have low reproductive rates and are very slow growing; pollination by the yucca moth (*Tegeticula antitheca*), upon which species relies, may not occur in fire damaged areas, further lowering reproductive success. Livestock also impact the reproductive success of these iconic native yuccas by eating accessible flowers and seed pods. A mature forest will not be re-established for centuries, if at all.

Photo 6. Joshua Tree.

Resource, Object, or Value

Ecological Value: Warm Desert Riparian and Riparian Wash Vegetation

Warm desert riparian and riparian wash vegetation was mapped and the ecological health of these communities evaluated along the Beaver Dam Wash, Welcome Creek, and many ephemeral drainages in 2011, during the Landscape Conservation Forecasting Process conducted in partnership with The Nature Conservancy. Woody species that typify both riparian communities include mesquite, native willows, and Fremont's cottonwood. In 2010, flooding removed many of the mature trees within the riparian zone of the Beaver Dam Wash and in some of the ephemeral drainages, creating a departure from the NRV unrelated to the infestations of exotic species.

Warm Desert Riparian and Riparian Wash Vegetation Status and Trend Table

Status of Resource, Object, or Value	Trend
Fair– NRV varies from 90-100% due to flooding and infestations of exotic salt-cedar, *Erodium* spp., and annual brome grasses.	Improving-natural recovery of riparian woody species along Beaver Dam Wash and in most drainages.

Warm Desert Riparian and Riparian Wash Inventory, Assessment, and Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
Warm Desert Riparian	114	114	114
Warm Desert Riparian Wash	3,345	3, 345	3,345

Stressors Affecting this Resource, Object, or Value

Riparian vegetation along Beaver Dam Wash, Welcome Creek, and in the ephemeral drainages is primarily being impacted by episodic flooding, exotic species infestations, drought, livestock grazing, and motorized recreational activities. Exotic salt cedar (*Tamarack* spp.) has invaded the riparian areas and competes with native species. Cattle in the Beaver Dam Slope and Jackson Wash Allotments have access to the riparian zones along Beaver Dam Wash and many ephemeral drainages that support riparian wash vegetation. Impacts related to livestock grazing include damage or destruction of sapling trees and soil disturbances that impair surface water quality and increase erosion of stream banks.

The riparian zone along Welcome Creek, in the vicinity of the Welcome Springs complex, is being impacted by livestock and by ATVs traveling along the stream channel. In FY 14, BLM will install exclosure fencing around the Welcome Springs complex, to protect this riparian zone from further grazing and motorized vehicle-related damage. While a majority of the fencing will be outside of the NCA, it will protect some riparian vegetation within the unit.

Resource, Object, or Value

Ecological Value: Mojave desert tortoise critical habitat

The desert tortoise (Mojave Population) was listed under the protection of the Endangered Species Act a threatened species in 1990 and critical habitat designated in 1994. Approximately 50,908 acres of the NCA are within designated critical tortoise habitat, in the Northeastern Recovery Unit. A majority of the designated critical habitat is within the creosote-white bursage community (22,041 acres), while the remainder is within blackbrush-Joshua tree communities (28,280 acres).

Desert Tortoise Habitat Status and Trend

Status of Resource, Object, or Value	Trend
Fair- communities are 100% departed from the NRV, due to exotic annual brome grasses.	Stable- in unburned areas (22,041 acres) Declining- in burned areas (22,640 acres)

Desert Tortoise Habitat Inventory, Assessment, and Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
67, 478	50,098	50,098	15,500

Stressors Affecting this Resource, Object, or Value

Wild fires, exotic invasive annuals, and predicted climate changes that benefit invasive species are the primary stressors affecting critical habitat for Mojave desert tortoise. The creosote-bursage community, which comprises a majority of the critical habitat, has not been damaged by recent wild fires, but remains at high risk because invasive brome grasses are present throughout this community. Approximately 80% of the blackbrush-Joshua tree shrublands have been damaged by fires and will not recover for many years. Some areas impacted by multiple fires have been converted to invasive brome grasslands which provide limited forage value or shade cover for tortoises.

Photo 7. Adult Mojave desert tortoise.

6 Summary of Performance Measures

The 2013 Manager's Report provides reporting tables that are focused primarily on ecological values and the health of land. Data and evaluations of status and trend for key ecological values are provided below, but clearly do not reflect all the resources, objects, and values that are identified, evaluated, and monitored by BLM in the NCA. Inventories, data collection, and monitoring are conducted each year for archeological and paleontological resources, for caves and karsts, for Wilderness areas, and for recreational uses. Data on these resources and values are also reported annually as Performance Measures, but not in the same units of measure as requested by the tables in this report.

Summary Table

Resource, Object, or Value	Status	Trend
Native Upland Vegetation	Fair– all communities 100 % departed from NRV due to exotic invasive annual grasses.	Stable in unburned areas (33,951 acres)
Joshua Tree National Natural Landmark (NNL)	Poor– NNL is 100% departed from the NRV, due to exotic annual brome grasses and forbs. Majority of mature Joshua trees damaged or destroyed by fires in NNL.	Declining in burned areas
Warm Desert and Riparian Wash Vegetation	Fair-NRV varies from 90-100% due to flooding and infestations of exotic salt cedar, *Erodium* spp.	Improving
Mojave desert tortoise critical habitat	Fair-all communities 100 % departed from NRV due to exotic invasive annual grasses.	Stable in unburned areas (22,041 acres) Declining in burned areas (22,640 acres)

7

Manager's Letter

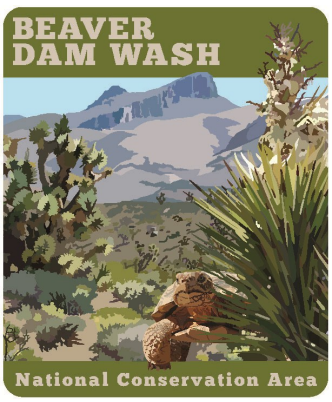
Dear Friends of the Beaver Dam Wash NCA:

The Manager's Annual Report highlights just a few of the activities and projects that BLM completed in FY 2013 to conserve and protect resource values in the Beaver Dam Wash NCA . Our efforts were furthered by contributions from many dedicated volunteers, community partners, researchers, and members of the public who support the purposes for which this NCA was designated by Congress in 2009.

Over the next three years, we will be focused on completing the legislatively-mandated Resource Management Plan and Comprehensive Travel and Transportation Management Plan for the NCA. While these planning efforts will continue to require considerable time and effort to complete, they are key to the long-term conservation, protection, and restoration of the NCA resources. As Major League Baseball great Yogi Berra once said: "If you don't know where you are going, you'll end up someplace else."

Our focus will also be on the following:

- We will continue to seek funding to implement landscape level fuel breaks to protect unburned areas of native vegetation and critical desert tortoise habitat in the NCA, through cooperative projects with BLM's Arizona Strip and Southern Nevada Field Offices and the Parashant-Grand Canyon National Monument.
- We will also continue to make public lands of the NCA available for studies that are consistent with its conservation and protection purposes, particularly research that furthers the understanding of post-fire recovery of native Mojave Desert vegetation communities and the development of effective biological and herbicidal controls for exotic invasive species.
- We will continue to work with great non-federal partners, like The Nature Conservancy and SUNCLF, to secure funding and support for innovative re-vegetation projects, to begin the restoration of fire-damaged areas of the NCA. We will also seek to develop new partnerships to involve local schools in the cultivation of containerized native plants for re-vegetation projects.
- And, lastly, we will continue to work closely with the National Park Service's National Natural Landmark Program to evaluate possible boundary changes for the Joshua Tree National Natural Landmark and identify other locations within the NCA where this iconic Mojave Desert yucca can be viewed and interpreted for public appreciation.



We thank you for your interest in and support of the Beaver Dam Wash NCA.

Sincerely,

NATIONAL CONSERVATION LANDS

Beaver Dam Wash

National Conservation Area

Bureau of Land Management

St. George Field Office

345 E. Riverside Drive

St. George, UT 84790

Phone: 435-688-3200

July 2014